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TITLE: SEMICONDUCTOR DEVICE

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INVENTOR-INFORMATION:

NAME NISHIMAKI, TATSUO

NISHIMAKI, TATSU

ASSIGNEE-INFORMATION:

SEIKO EPSON CORP

EIKO EPSON CORP

COUNTRY N/A

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ABSTRACT:

PURPOSE: To set a current flowing in an operational amplifier to several-stage by providing plural constant current sources and a constant current

source

selection circuit into one semiconductor device.

CONSTITUTION: The semiconductor device is provided with a differential stage 101 of an operational amplifier, PMOS switches 104, 105 to select the

101 of an operational amplifier, PMOS switches 104, 105 to select the supply of

a current to a constant current source, differential stage constant current sources 106, 107 to supply a current to the differential stage, an

operational amplifier stage $108\ \mathrm{to}$ amplify a voltage

difference between a noninverting input 109 and an inverting input 110, constant

current source selection registers 111, 112 to latch a signal to select the

constant current sources 106, 107, an operational amplifier output stage outputting an

output an output from the differential stage externally and an output stage constant

current source 114 to set a current consumption of the output stage. Then the

current consumption in the differential stage is selected by writing